

# DUAL MODE TELEVISION TUNER CAPABLE OF PROCESSING BOTH DIGITAL AND SATELLITE TELEVISION SIGNALS AND METHOD THEREOF

## Abstract

A television receiver includes a digital TV preamp for amplifying a received RF signal within a first frequency range, a satellite TV preamp for amplifying the received RF signal within a second frequency range, a first mixer having inputs coupled to the output of either the digital or satellite TV preamp according to a mode selection signal, a digital TV band-pass filter for filtering the output of the first mixer centered at a first center frequency being selectively coupled to the output of the first mixer according to the mode selection signal, a satellite TV band-pass filter for filtering the output of the first mixer centered at a second center frequency being selectively coupled to the output of the first mixer according to the mode selection signal, and a second mixer stage having inputs coupled to the output of the digital TV filter stage and the satellite TV filter stage.